

AUG 20 2002
PATENT & TRADEMARK OFFICE
LAHIVE & COCKFIELD
L L P
COUNSELLORS AT LAW
28 STATE STREET
BOSTON, MASSACHUSETTS 02109-1784
TELEPHONE (617) 227-7400
FAX (617) 742-4214
lc@lahive.com

LAHIVE, JR. (1928-1997)
THOMAS V. SMURZYNSKI
RALPH A. LOREN
GIULIO A. DeCONTI, JR.
ANN LAMPORT HAMMITTE
ELIZABETH A. HANLEY
AMY BAKER MANDRAGOURAS
ANTHONY A. LAURENTANO
KEVIN J. CANNING
JANE E. REMILLARD
DeANN FORAN SMITH
PETER C. LAURO
JEANNE M. DIGIORGIO
DEBRA J. MILASINCIC, Ph.D.
DAVID J. RIKKERS
DAVID R. BURNS
JOHN S. CURRAN
SEAN D. DETWEILER

CYNTHIA L. KANIK, Ph.D.
MEGAN E. WILLIAMS, Ph.D.
RICHANAND
MICHAEL PHILLIPPS
LISA M. DIROCCO
HATHAWAY P. RUSSELL
MARIA LACCOTRIPE ZACHARAKIS, Ph.D.
PETER A. DiMATTIA
VINCENT P. LOCCISANO
MERIDETH C. ARNOLD
SENIOR COUNSEL
JAMES E. COCKFIELD
OF COUNSEL
JEREMIAH LYNCH
WILLIAM A. SCOFIELD, JR.
SIBLEY P. REPPERT

PATENT AGENTS
THEODORE R. WEST
SHAYNE Y. HUFF, Ph.D.
DANIEL B. KO

TECHNICAL SPECIALISTS
CYNTHIA M. SOROOS
PETER W. DINI, Ph.D.
EUIHOON LEE
JENNIFER K. ROSENFELD
ALLAN TAMESHTIT, Ph.D.
CATHERINE E. McPHERSON
ERIC F. WAGNER, Ph.D.
SHAHID HASAN, Ph.D.
JACOB G. WEINTRAUB
JONATHAN M. SPARKS, Ph.D.
CRISTIN E. HOWLEY, Ph.D.

* Admitted in NY only
** Admitted in TX only

RECEIVED

AUG 30 2002

TECH CENTER 1600/2900

Commissioner for Patents
Washington, D.C. 20231

August 14, 2002

Re: U.S. Patent Application No.: 10/018638
For: GROWTH DIFFERENTIATION FACTOR-9 REGULATORY SEQUENCES
AND USES THEREFOR

Inventors: Matzuk, M. M. et al.
Filed: December 19, 2001
Our Ref. No.: MTN-029US

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Copies of the references cited in PTO Form 1449 (22);
4. A Statement of Limited Recognition Under 37 CFR §10.9(b); and
5. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any other necessary fees due in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to:
Commissioner for Patents, Washington, D.C. 20231 on:

August 4, 2002
Date

Maria C. Laccotripe, Ph.D., Limited Recognition Under 37 CFR §10.9(b)

Respectfully submitted,
LAHIVE & COCKFIELD, LI

Maria C. Laccotripe, Ph.D.
Attorney for Applicants
Limited Recognition Under 37 CFR §10.9(b)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Matzuk, M. M. *et al.*

Serial No.: 10/018638

Filed: December 19, 2001

For: *GROWTH DIFFERENTIATION FACTOR-9
REGULATORY SEQUENCES AND USES
THEREFOR*

Attorney Docket No.: MTN-029US

Group Art Unit: Not yet assigned

Examiner: Not yet assigned

RECEIVED

AUG 30 2002

TECH CENTER 1600/2900

Commissioner for Patents
Washington, D.C. 20231

Certificate of First Class Mailing (37 CFR §1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

8/14/02

Date of Signature and of Mail Deposit

By:

Maria C. Laccotripe, Ph.D.

Attorney for Applicants

Limited Recognition Under 37 CFR §10.9(b)

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

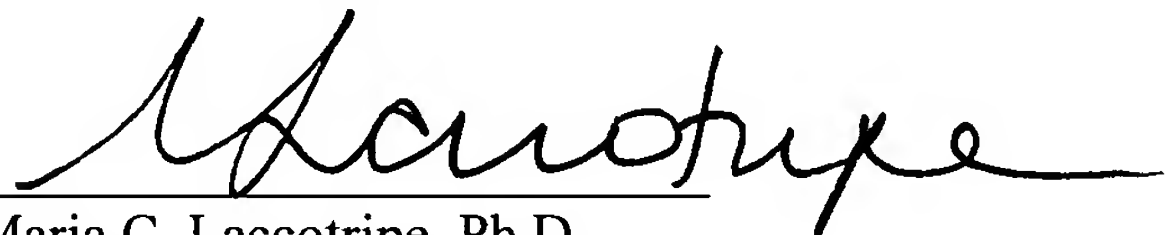
Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists.

Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, the Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,
LAHIVE & COCKFIELD, LLP



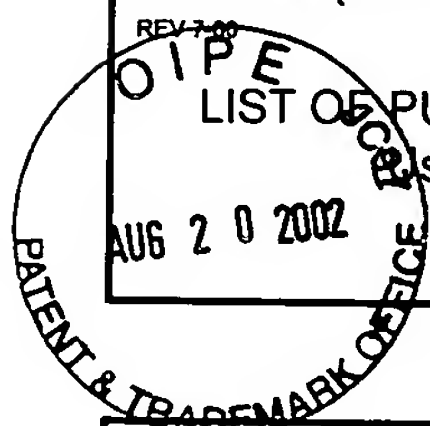
Maria C. Laccotripe, Ph.D.
Attorney for Applicants
Limited Recognition Under 37 CFR §10.9(b)

28 State Street
Boston, MA 02109
(617) 227-7400

Date: 8/14/02

AEM/JER/MCL/CEH/alf
Enclosures

| | | | | |
|--|--|---|--|----------------------------------|
| APPLICANT FACSIMILE OF FORM PTO-1449 REV. 7-99 | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY DOCKET NO. MTN-029US | SERIAL NO. 10/018638 |
| LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary) | | | APPLICANT Matzuk, M. M. et al. | |
| | | | FILING DATE December 19, 2001 | GROUP Not yet assigned |



U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|----|-----------------|-------|----------------|-------|----------|-------------------------------|
| | A1 | 5,614,396 | 03/97 | Bradley et al. | 435 | 172.3 | |
| | A2 | 5,821,056 | 10/98 | Lee | 435 | 6 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
|--|----|-------------------|-------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | A3 | WO 95/06118 A1 | 03/95 | WO | | | | |
| | A4 | WO 97/19180 A2,A3 | 05/97 | WO | | | | |

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|-----|---|
| | A5 | EMBL database acc. no.: AA388141; vb59g09.r1 Ko mouse embryo 11 5dpc Mus musculus cDNA clone IMAGE:761344 5', mRNA sequence |
| | A6 | EMBL database acc. no.: AA035964; mi70f04.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone IMAGE:468895 5' similar to SW:UCR7_BOVIN P13271 UBIQUINOL-CYTOCHROME C REDUCTASE 9.5 KD PROTEIN ;, mRNA sequence |
| | A7 | Bodensteiner, K.J. et al. Molecular cloning of the ovine growth/differentiation factor-9 gene and expression of growth/differentiation factor-9 in ovine and bovine ovaries. <i>Biol. Reprod.</i> 1999 Feb;60(2):381-6 |
| | A8 | Carabatsos, M.J. et al. Characterization of oocyte and follicle development in growth differentiation factor-9-deficient mice. <i>Dev. Biol.</i> 1998 Dec 15;204(2):373-84 |
| | A9 | Casadaban, M.J. et al. Analysis of gene control signals by DNA fusion and cloning in <i>Escherichia coli</i> . <i>J. Mol. Biol.</i> 1980 Apr;138(2):179-207 |
| | A10 | Dong, J. et al. Growth differentiation factor-9 is required during early ovarian folliculogenesis. <i>Nature</i> . 1996 Oct 10;383(6600):531-5. |
| | A11 | Dube, J.L. et al. The bone morphogenetic protein 15 gene is X-linked and expressed in oocytes. <i>Mol. Endocrinol.</i> 1998 Dec;12(12):1809-17 |
| | A12 | Fitzpatrick, S.L. et al. Expression of growth differentiation factor-9 messenger ribonucleic acid in ovarian and nonovarian rodent and human tissues. <i>Endocrinology</i> . 1998 May;139(5):2571-8 |
| | A13 | Garver, R.I. Jr. et al. Strategy for achieving selective killing of carcinomas. <i>Gene Ther.</i> 1994 Jan;1(1):46-50 |
| | A14 | Hayashi, M. et al. Recombinant growth differentiation factor-9 (GDF-9) enhances growth and differentiation of cultured early ovarian follicles. <i>Endocrinology</i> . 1999 Mar;140(3):1236-44 |
| | A15 | Incerti, B. et al. Structure of the mouse growth/differentiation factor 9 gene. <i>Biochim. Biophys. Acta</i> . 1994 May 26;1222(1):125-8 |
| | A16 | Liang, L.-F. et al. FIGa, a germ cell specific transcription factor involved in the coordinate expression of the zona pellucida genes. <i>Development</i> . 1997 Dec;124(24):4939-47 |
| Examiner | | Date Considered |
| *EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | |

RECEIVED

AUG 30 2002

TECH CENTER 1600/2900

| | | | |
|--|---|--|--------------------------------------|
| APPLICANT FACSIMILE OF COVER SHEET PTO-1449 REV 7-80 | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY DOCKET NO MTN-029US | SERIAL NO. 10/018638 |
| LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary) | | APPLICANT Matzuk, M. M. et al. | |
| | | FILING DATE December 19, 2001 | GROUP N t yet assigned |

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|--|-----------------|------|------|-------|----------|-------------------------------|
| | | | | | | | |
| | | | | | | | |

FOREIGN PATENT DOCUMENTS

[illegible]

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

[illegible]